

Chapter 6.3 COST/BENEFIT ANALYSIS

Construction Grants.

The Federal construction grants program was initiated in 1958 to provide financial assistance to municipalities for the planning, design, and construction of publicly owned treatment works. Until 1988, the program was an essential element in pollution control efforts, without which many localities would have been unable to provide wastewater treatment systems.

Through 1988, Virginia received approximately \$1.2 billion in federal appropriations for construction grants. These federal funds financed up to 75% of the total eligible cost of approximately 183 projects. The state contributed another \$52.3 million toward project costs, with the remainder coming from local sources. Total local investment in these projects is estimated at \$500 million.

Virginia Revolving Loan Fund.

In 1988, the conversion from a grant program to a low-interest loan program to provide financial assistance for the planning, design and construction of POTW's began. The 1986 General Assembly created the Virginia Water Facilities Loan Fund, through which loans could be made to local governments at or below current market interest rates for wastewater treatment improvements. Principal and interest repaid into the fund could then be loaned again for additional projects. The Federal Water Quality Act of 1987 established a State Revolving Loan Fund Capitalization Grant Program that provided an avenue for states to convert federal grant monies into a State Revolving Loan Fund.

On June 10, 1988, Virginia became the first state in EPA Region III and the fifth state in the nation to receive authorization to administer a State Revolving Loan Program. Since then, Virginia has received federal capitalization grants in each fiscal year (FY's 88 through 03) totaling \$525,770,838. In addition, Virginia has provided \$105,154,170 to the program.

These funds, along with accrued interest earnings, repayments by loan recipients, and the implementation of a leveraging program in FY's 1999 and 2000 when demand exceeded available resources, have enabled the VRLF to provide loan assistance to 391 projects totaling over \$1 billion.

AgBMP Loan Program.

The 1999 General Assembly amended Chapter 22 of the Code of Virginia, expanding the activities of Virginia's Water Facilities (Wastewater) Revolving Fund to allow low interest loan financing of specific agricultural best management practices (AgBMP). This legislation was to encourage the Commonwealth's farm communities to implement best management practices that reduce or eliminate agricultural non-point source pollution of Virginia's waters. This funding initiative went into effect July 1, 1999. Agreements were reached with the Virginia Resources Authority and the State's three Farm Credit Associations to allow them to perform necessary loan underwriting and execute and disburse loan proceeds to the recipients.

Virginia received its first request for low-interest loan assistance from its AgBMP program on January 14, 2000. Since then, DEQ has set aside \$10 million and authorized more than \$8.6 million in low-interest loan assistance to Virginia farmers for eligible BMP projects that would improve water quality in the Commonwealth.

Brownfield Program.

The 2001 General Assembly amended the VRLF legislation to make loan assistance available for remediation of contaminated Brownfield properties across the Commonwealth. This funding initiative provides assistance to eligible entities for activities that result from an approved site characterization and remediation plan and where the remediation effort results in an improvement to or protection of surface or groundwater. Two Brownfield projects were included on the FY 03 funding list.

Land Conservation Loan Program.

The 2003 General Assembly enacted legislation that expanded the activities of the fund by allowing Virginia to authorize low-interest loans for acquisition of title or other rights to real property when the Board was satisfied that the acquisition would protect or improve water quality and prevent pollution of state waters. The legislation provided that financing for land acquisition would be available only in those fiscal years when all other eligible loan requests from local government had been satisfied. This program has been included in the FY 04 loan solicitation.

Table 6.3 - 1 summarizes Revolving Loan Fund status as of June 30, 2003.

Table 6.3 - 1 Summary of Revolving Loan Fund Status

	Number	Amount
Section 212 Loans Closed*	209	\$960,310,745.27
AgBMP Loans Closed	129	\$ 7,991,048.81
Section 212 Loans Approved (not closed as of 6/30/03)	22	\$103,193,070.00
AgBMP Loans Authorized	7	\$ 638,301.00
Section 212 Loans Targeted for FY 2004**	21	\$183,038,949.00
Additional Section 319 Loans Targeted for FY 2004	3	\$ 6,780,100.00
TOTAL	391	\$1,261,952,214.08

* Includes projects funded with loan payments, leveraged bond proceeds, and amounts utilized for Program Administration.

** Pending receipt of federal funds.

The impact of Virginia's loan program on water quality and public health can be summarized as follows:

- # Eliminated Virginia's 12 remaining municipal "primary discharge" treatment plants
- # Upgraded or replaced 32 inadequate municipal wastewater treatment lagoon systems
- # Upgraded, expanded or replaced 117 outdated public wastewater treatment facilities
- # Eliminated 133 major points of raw sewage overflows
- # Improved water quality and reduced operating expenses at 70 projects by significantly reducing infiltration/inflow loading to the plant and the receiving stream
- # Addressed 33 potential public health hazard situations by eliminating failing septic systems, pit privies and straight-line discharges through the construction of public sewer systems
- # Installed nutrient removal technology at 6 municipal treatment facilities discharging to the Chesapeake Bay
- # Established 5 local loan program for the replacement/rehabilitation of individual on-site wastewater treatment systems

As of June 30, 2003, the State's AgBMP Program had provided 129 low-interest loans to Virginia

farmers to assist them with implementation expenses relating to the following 178 agricultural best management practices.

- 97 Animal Waste Control Facilities of which 50 were litter storage sheds at poultry operations, 38 liquid waste storage facilities at dairy farms, 7 dry manure stacking sheds at beef cattle operations, 1 dry manure storage and composting structure at a horse farm and 1 waste storage lagoon at a swine operation.
- 26 normal mortality Composting Facilities at poultry operations
- 22 Grazing Land Protection practices at beef cattle operations
- 16 Animal Waste Structure Pumping Equipment installations at dairy and swine operations
- 7 Loafing Lot Management Systems at dairy farms
- 5 Stream Protection practices at beef operations
- 2 Relocation of Confined Animal Feeding Operations, dairy and beef
- 2 Animal Travel Lane Stabilizations at dairy farms
- 1 Agricultural Chemical & Fertilizer Handling Facility at a grain farming operation